ECE 530 Cloud Computing **Advantages of Cloud Computing** Ioannis Papapanagiotou

• Lower computer costs:

- You do not need a high-powered and high-priced computer to run cloud computing's web-based applications.
- Since applications run in the cloud, not on the desktop PC, your desktop PC does not need the processing power or hard disk space demanded by traditional desktop software.
- When you are using web-based applications, your PC can be less expensive, with a smaller hard disk, less memory, more efficient processor...
- In fact, your PC in this scenario does not even need a CD or DVD drive, as no software programs have to be loaded and no document files need to be saved.

Improved performance:

- With few large programs hogging your computer's memory, you will see better performance from your PC.
- Computers in a cloud computing system boot and run faster because they have fewer programs and processes loaded into memory...

Reduced software costs:

- Instead of purchasing expensive software applications, you can get most of what you need for free-ish!
 - most cloud computing applications today, such as the Google Docs suite.
- better than paying for similar commercial software
 - which alone may be justification for switching to cloud applications.

Instant software updates:

- Another advantage to cloud computing is that you are no longer faced with choosing between obsolete software and high upgrade costs.
- When the application is web-based, updates happen automatically
 - available the next time you log into the cloud.
- When you access a web-based application, you get the latest version
 - without needing to pay for or download an upgrade.

Improved document format compatibility.

- You do not have to worry about the documents you create on your machine being compatible with other users' applications or OSes
- There are potentially no format incompatibilities when everyone is sharing documents and applications in the cloud.

- Unlimited storage capacity:
 - Cloud computing offers virtually limitless storage.
 - Your computer's current 1 Tbyte hard drive is small compared to the hundreds of Pbytes available in the cloud.
- Increased data reliability:
 - Unlike desktop computing, in which if a hard disk crashes and destroy all your valuable data, a computer crashing in the cloud should not affect the storage of your data.
 - if your personal computer crashes, all your data is still out there in the cloud, still accessible
 - In a world where few individual desktop PC users back up their data on a regular basis, cloud computing is a data-safe computing platform!

- Universal document access:
 - That is not a problem with cloud computing, because you do not take your documents with you.
 - Instead, they stay in the cloud, and you can access them whenever you have a computer and an Internet connection
 - Documents are instantly available from wherever you are
- Latest version availability:
 - When you edit a document at home, that edited version is what you see when you access the document at work.
 - The cloud always hosts the latest version of your documents
 - as long as you are connected, you are not in danger of having an outdated version

- Easier group collaboration:
 - Sharing documents leads directly to better collaboration.
 - Many users do this as it is an important advantages of cloud computing
 - multiple users can collaborate easily on documents and projects
- Device independence.
 - You are no longer tethered to a single computer or network.
 - Changes to computers, applications and documents follow you through the cloud.
 - Move to a portable device, and your applications and documents are still available.